A1 cont.

26. (New) The device of claim 25, wherein said laser emitters are microlasers.

27. (New) The device of claim 25, wherein said elements imposing a phase delay are selected from the group consisting of electro-optical, magneto-optical, and thermo-optical elements.

28. (New) The device of claim 25, wherein said frequency slaving means comprises means for forming a beat signal from the beams emitted by said first and second lasers of each said laser emitter pair, and means for adjusting the emission frequency of one of said laser emitters of said laser emitter pair according to the beat signal.

29. (New) The device of claim 28, wherein said means for adjusting the emission frequency comprises means for comparing the beat signal to a reference signal provided by a reference source, and means for modifying an optical length of a cavity of said laser emitter for emission frequency adjustment.

30. (New) The device of claim 29, wherein said source is common to all the laser emitter pairs.

31. (New) The device of claim 25, which further comprises means for slaving said phase delay according to a beat signal between the beam which passes through said phase delay element of the array and another beam.

32. (New) An ultrahigh frequency emitting device, having a plurality of N laser emitter pairs, each said laser emitter pair having a first and a second laser emitter emitting at a first and a second frequency ω_1, ω_2, which are different; means for slaving each said laser emitter pair in a frequency-wise

A1 cont.

manner; means for modifying the frequency of one of said laser emitters of at least one said laser emitter pair with respect to the frequency of the other laser emitter of said laser emitter pair; a number of N means for mixing each of the beams emitted by said first emitters with each of the beams emitted by said second emitters, and for producing a signal at the frequency ω_1-ω_2; a number of N antenna-forming means for emitting radiation at the frequency ω_1-ω_2.

33. (New) The device of claim 32, wherein said laser emitters are microlasers.

34. (New) The device of claim 32, wherein said first and second laser emitters are constituted by a dual frequency source, emitting at the respective frequencies ω_1 and ω_2.

35. (New) The device of claim 32, wherein said means for modifying the frequency comprises an electro-optical modulator.

36. (New) The device of claim 35, wherein said electro-optical modulator is a semiconductor modulator.

37. (New) A radar device having an ultrahigh frequency emitting device as in claim 25, with said laser emitters being assembled in an array, a coupling or transmission by optical fibers being implemented between the said elements thereby imposing phase delays, and means for mixing the emitted beams.

38. (New) A radar device having an ultrahigh frequency emitting device as in claim 25, with said laser emitters being assembled in an array and multiplexed by a multiplexer, an optical fiber connecting the multiplexer and a demultiplexer.

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39. (New) The radar device of claim 37, wherein said frequency slaving means is arranged in an array.

40. (New) The radar device of claim 37, wherein said frequency slaving means comprises means for forming a beat signal from the beams emitted by said first and second lasers of each said laser emitter pair, and means for adjusting the emission frequency of one said laser emitters of said laser emitter pair according to the beat signal, said beat signal forming means being merged with said means for mixing either the beam emitted by the first laser and each of the N delayed beams, or each of the beams emitted by said first emitters, with each of the beams emitted by said second emitters and delayed by the elements making it possible to impose a phase delay.

41. (New) The device of claim 38, wherein each said laser emitter has a cavity and wherein said cavities of said laser emitters are shifted frequency-wise with respect to one another.

42. (New) The device of claim 41, wherein said cavities are shifted frequency-wise by adjustment of their length.

43. (New) The device of claim 42, wherein each said laser cavity is associated with a Bragg grating type mirror, implemented on a corresponding guide of said multiplexer.

44. (New) The radar device of claim 38, wherein said frequency slaving means is arranged in an array.

45. (New) The radar device of claim 38, wherein said frequency slaving means comprises means for forming a beat signal from the beams emitted

A1 Conc.

by said first and second lasers of each said laser emitter pair, and means for adjusting the emission frequency of one said laser emitters of said laser emitter pair according to the beat signal, said beat signal forming means being merged with said means for mixing either the beam emitted by the first laser and each of the N delayed beams, or each of the beams emitted by said first emitters, with each of the beams emitted by said second emitters and delayed by the elements making it possible to impose a phase delay.

REMARKS

After entry of this amendment, claims 25-45 are pending in the application. Claims 1-24 have been cancelled without prejudice. Claims 25-45 have been added in this amendment.

It is submitted that this Amendment has antecedent basis in the application as originally filed, including the specification, claims and drawings, and that this Amendment does not add any new subject matter to the application. Consideration of the application as amended is requested. It is submitted that this Amendment places the application in suitable condition for allowance; notice of which is requested.

If the Examiner feels that prosecution of the present application can be expedited by way of an Examiner's amendment, the Examiner is invited to contact the Applicant's attorney at the telephone number listed below.

Respectfully submitted,

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